



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,484	07/28/2003	Albert Chenouda Salib	203-0903 (FGT 1871 PA)	5021
7590	11/10/2004		EXAMINER	
Kevin G. Mierzwa Suite 250 28333 Telegraph Road Southfield, MI 48034			ZANELLI, MICHAEL J	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/628,484	SALIB ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	MJW
	Michael J. Zanelli	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 28 July 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-23 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date: _____.   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/28/03; 4/1/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

1. The application filed 7/28/03 has been examined. Claims 1-23 are pending.
2. The IDS filed 8/28/03 and 4/1/04 have been considered as indicated. The foreign language documents which did not include a statement of relevancy and/or translation were not considered. 37 CFR 1.98(a)(3).
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The disclosure is objected to because of the following informalities:
  - A. Applicant is requested to provide the serial numbers of the applications cited in paragraphs [0008] and [0053].
  - B. In paragraphs [0057] and [0070-71] applicant refers to controller 78 as both the transition[al] controller and proportional-integral-derivative controller. Figure 5 identifies the transition controller as "76" and the PID controller as "78".
5. Claims 1-21 are objected to because of the following informalities:
  - A. As per claims 1 and 9, the claims are unclear as to what is meant by "the higher" of the first and second control signals. Is this referring to a numerical value or some type of priority structure? Also at line 10 change "to" to --as-- to be grammatically correct.
  - B. As per claim 14, the claim fails to further limit the subject matter of claim 9 insofar as claim 9 already establishes that the control signals are pressure signals.

C. As per claim 16, the claim fails to further limit the subject matter of claim 9 insofar as claim 9 already establishes that the system is a rollover control system.

D. As per claim 17, lines 1-2 recite a method for controlling a hydraulic safety system; however, the recited steps do not provide such control. Is the second control signal provide to a hydraulic safety system? (see for example claims 1 and 9).

E. All claims depending from an objected base claim are also objected to as containing the same deficiencies.

6. Claims 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. As per claim 9, at line 12 "the safety system" lacks antecedence.

B. All claims depending from a rejected base claim are also rejected as containing the same deficiencies.

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1-23 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-23 of copending Application No. 10/628,632 and claims 1-23 of copending Application No. 10/628,685. This is a provisional double patenting rejection since

the conflicting claims have not in fact been patented. All three applications contain identical claims.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Inagaki (5,640,324).

A. As per claim 17, Inagaki discloses a dynamic behavior control method for stabilizing unstable behavior of a vehicle (i.e., “safety system”). As noted in col. 5, lines 10-11, the behavior control is carried out using a hydraulic brake control system. The disclosed method includes determining an angular vehicle position (col. 1, lines 44-46); generating a first control signal in a first controller (col. 8, lines 53-55); and when the angular position is greater than a threshold (i.e. “unstable” condition), a second control signal from a second controller is generated (col. 9, lines 3-18). See also col. 10, lines 1-17.

B. As per claim 18, as above wherein the threshold corresponds to a linear (“stable”) and non-linear (“unstable”) region (see Fig. 8).

10. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ding (6,427,102).

A. As per claim 1, Ding discloses a system for controlling a safety system of a vehicle, in particular vehicle stability control (col. 1, lines 12-16). As noted in col. 3, lines 34-40, the system includes at least a first and second controller for generating control signals and an arbitration module which selects a control signal based on a priority scheme. The selected control signal is used to control the vehicle safety system.

11. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al. (6,654,674).

The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

A. As per claims 1, 9, 17 and 22, Lu discloses a system and method for controlling a safety system (i.e. roll stability) of a vehicle. The system (Fig. 2) includes two controllers (50,52) and a priority ("arbitration") unit (56). As noted in the Abstract, if a potential rollover event is detected (i.e. roll angle threshold is exceeded), controller 52 is given priority control of the safety system (i.e. brake pressure control; col. 3, lines 38-41). Under normal operating conditions a first ("transition") controller (50) controls operation of the brakes whereas a second ("PD") controller (52) controls

Art Unit: 3661

operation of the brakes during potential rollover events (Figs. 3,5). As noted in col. 8, line 65 to col. 9, line 22 the controllers use feedback and PID variations for control.

B. As per claims 2-5, 10-13, 18, 21 and 22, as above wherein one controller is a "transition" controller which operates under "normal" conditions whereas the other controller operates under "unstable" conditions and uses various PID control configurations. See col. 8, line 65 to col. 9, line 22.

C. As per claims 6-8, 14-16, 19 and 20, as above wherein the system uses the vehicle's brakes to increase stability and prevent potential rollovers. Rollover conditions may be detected by a sensor (34) or lifting of the vehicle's wheels (col. 7, lines 15-17).

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inagaki in view of Wielenga (6,065,558).

A. As per claims 19 and 20, Inagaki is applied as above. Inagaki discloses various sensors for detecting the angular vehicle position (Fig. 1). The claimed invention differs in that the angular position comprises a roll angle or corresponds to two-wheel lift. However, Inagaki does suggest that other vehicle dynamic parameters indicative of vehicle behavior may be monitored and used for controlling vehicle stability (col. 10, lines 61-67). One of ordinary skill in the art at the time of invention would have found it obvious to utilize other known variables indicative of vehicle stability based on this suggestion.

B. For example, Wielenga discloses a vehicle anti-rollover brake system in which the brakes of the vehicle are controlled to prevent rollover (Abs). Wielenga determines the instability of the vehicle by sensing roll angle or detecting wheel lift (col. 4, lines 9-13). One of ordinary skill in the art at the time of invention would have found it obvious to utilize these alternative dynamic parameters in the system of Inagaki because it would have provided an indication of vehicle instability.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Zanelli whose telephone number is (703) 305-9756. The examiner can normally be reached on Monday-Thursday 5:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/mjz



MICHAEL J. ZANELLI  
PRIMARY EXAMINER